Delta-Schoolcraft ISD

Northwoods Mathematics, Science & Technology Center

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2006-2007

Gifted & Talented Final Report

Math Art Camp

Escanaba Middle School

August 6 – August 17, 2007

Northwoods Mathematics, Science & Technology Center

Michigan Virtual Math Art Camp

The Delta-Schoolcraft ISD partnered with our Northwoods Mathematics, Science & Technology Center, Bonifas Art Center, Local Schools and Michigan Virtual University (MVU) to offer an innovative summer program for 20 students in grades sixth through 8th grades, Michigan Virtual Math Art Camp. The program was designed to help students prepare for Algebra in high school and could be for gifted or struggling students since students could work at their own pace through online learning. Michigan Virtual University awarded Mathematics and Science Centers scholarships for virtual math and science summer camps for 20 hours of online mathematics or science activities. In the DSISD region we collaboratively decided to work together as a team to develop a unique summer experience through partners to offer a mathematics experience that would motivate students to learn mathematics while at the same time increase their algebraic understanding of the new high school content expectations in algebra. By partnering with the local art center and the local high schools through the Safe Schools partnerships we were able to bring the partners together. One of the goals in the Safe Schools program is to improve the content achievement of our students.

The online mathematics instructor was provided through MVU. It was decided in addition to hire local math instructors from Escanaba Middle school, Amanda Gibbons (Escanaba High School mathematics teacher) and Brent Sauve (Escanaba Middle Computer School to help any students who may need math content instruction and encouragement.

April South-Olson, Bonifas Art Center instructor developed with help from other Bonifas personnel a curriculum that presented the online mathematics concepts using art to introduce the math idea. The students then worked on the mathematics on the computers using the online blackboard system. The mathematics class was held on the computers with the two EMS teachers supporting with additional problems and teaching mini-lessons as necessary. Students took daily pre-tests, completing assignments on the computer with the blackboard teacher in Lansing.

The tests for the assignments were given for the assignments on the computer. The students were given extra practice in graphing, solving equations and exponents. They had experiences using the online learning community for instruction. "It is really all about the individual learner", Gibbons said. Lee Brown from the Daily Press wrote in a news paper article this quote came from, at participating schools, students with appropriate ability levels can study a wide variety of topics — even including HTML coding and Mandarin Chinese—all over the Internet.

Attached to this report is a daily format of the typical day, busing information, and other attachments we used to explain the program to others. Some of the ways students put their new math skills to work in designing art project included, creating "found art" projects – "two"- and "three-dimensional displays incorporate photos and objects on a flat surface. Others used math symbolically or abstractly. The math/art class is designed for students of all ability levels. The field trip to a UP artist's studio, Ryan Brayak was the highlight of the two weeks for the students. A group sculpture was created at the studio and delivered back to the area to the students' and teachers' delight and pride. Thank you to the

teachers, parents, Michigan Department of Education, legislators, and all who supported this effort a wonderful learning experience for the students. The Michigan Virtual Math Art camp was a success. Students learned mathematics in a conceptual way, *and* created art!